THE USE OF TASK COMPLEXITY IN INTERACTIONS AMONG INDONESIAN EFL LEARNERS

(A Thesis)

By

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MASTER IN ENGLISH EDUCATION STUDY PROGRAM
FACULTY OF TEACHER TRAINING AND EDUCATION
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ABSTRACT

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The current study explored the effect of task types manipulated along with complex resource-directing and complex resource-depleting on student interactions in terms of comprehension check, confirmation check, and clarification request. Fifteen pairs of tenth graders from SMAN 1 Pringsewu, consisting of high and low English proficiency levels, participated. Three task types were administered, and student utterances were transcribed, coded, and statistically analyzed. The results showed that the task consisting of many unfamiliar elements generated more comprehension checks and clarification requests. Similarly, the task which included people with various age ranges resulted in more clarification requests. In contrast, none of the tasks generated more confirmation checks. These findings, supported by statistical analyses, suggest that complex resource manipulation promoted more interaction only for clarification request measures. This partially supports the Cognition Hypothesis. Concerning this, further research should explore interactions across different task types and student proficiency levels, focusing on how students negotiate for meaning.

Keywords: *cognition hypothesis, interaction, negotiation of meaning, task complexity*

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Kiromil Baroroh was born in Podomoro on April 2, 1999, to Mr. Bangun Wahyu Budi Santoso and Ms. Sri Karyawati. She is the eldest child, with a sister named Pinurih Lukitaningtyas.

She began her education at TK Hutama Karya Podomoro, Pringsewu, in 2004. She continued her primary education at SDN 3 Podomoro until 2010, before transferring to SDN 1 Sumberagung, Pringsewu for her final year of elementary school. She then enrolled at SMPN 1 Ambarawa, where she actively participated in several English and art competitions. Her higher education continued at SMAN 1 Pringsewu, from which she graduated in 2017. In the same year, she was admitted to the English Education Study Program at the University of Lampung through the SNMPTN program. During her undergraduate studies, she was actively involved in the English Society Unila, which enriched her academic and extracurricular experience. In 2022, she advanced her education by being accepted into the Master's program in English Education at the same university.

Her passion for teaching extends beyond her formal education. She teaches English to students of various ages in an English course, which has provided her with valuable insights and experiences from different perspectives. Additionally, she works as an academic tutor for several online programs specializing in English for specific purposes, which broadens her teaching experience.

DEDICATION

This thesis is dedicated to my inspiring lecturers, whose wisdom has been

a guiding light; to my parents, whose endless support and love have been

my foundation; and to myself, for embracing the endless journey of learning

with passion, patience, and persistence.

MOTTO

"Take responsibility for what you have started,

enjoy the process, and do your best."

(The Author)

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Hopefully, this thesis will make a positive contribution to educational development and to those who want to carry out further research. The author realizes that this work is far from perfection. There may be weaknesses and mistakes. Hence, any comments and suggestions would be gratefully accepted.

Bandar Lampung, June 09, 2024
The Author,

Kiromil Baroroh

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I. INTRODUCTION

This chapter covers the background of the research, research questions, objectives of the research, uses of the research, scope of the research, and definition of terms.

1.1 Background of the Research

In order to effectively acquire language, learners need to be exposed to comprehensible input (Krashen, 1982; Long, 1983b) by practicing the language in meaningful contexts through interaction (Long, 1983a; Tien, 2022). Long states that interaction is important for language acquisition for it leads to modifications of conversations and linguistics which in turn provide the necessary input required for learning. Mackey (2002) believes that interaction can help learners improve their language skills by receiving feedback on how they communicate. When learners express their messages, they can find out if they are clear or not from the reactions of their interlocutors. For instance, other speakers might ask for more information, clarification, or explanation. This situation will trigger the learners to adjust their messages to make them more understandable and effective. This is how they are challenged to produce better language and involved in the process of negotiation of meaning (Baharun et al., 2018; Yufrizal, 2001).

Further, the features to which Varonis and Gass (1985) referred as interactional modifications (comprehension check, clarification request, and confirmation check), determine negotiation as a form of communication appropriate to fulfill the

learners' needs and requirements during the learning process. In addition, negotiation is generally measured through interactional moves such as clarification requests, comprehension checks, and confirmation checks. The process of negotiation of meaning among interlocutors will make the conversation flow well (Yufrizal, 2011). During negotiation of meaning, interlocutors possess the metacognitive awareness to identify comprehension difficulties experienced by their partner (Flora, 2022). In line with this, learners engage in negotiating for meaning which occurs during an interaction may gain more opportunities for language learning and can help learners with their language acquisition development (Gass, 2005; Mackey, 1999). Pica (1996) considered negotiation of meaning a critical component of classroom interaction, as it facilitates the comprehension and production of language for learners. When learners engage in negotiation, they usually receive more comprehensible input and feedback that are easier to understand. In other words, negotiation leads to better comprehensibility that highlights the input and output (Gilabert et al., 2009). In other words, the process of interaction to negotiate for meaning has been proven to facilitate learners' language learning (Baharun et al., 2018). Interaction processes like negotiation of meaning can be facilitated through performing interactive tasks which are all helpful in the process of L2 development (Pica et al., 1991; Richards, 1990; Robinson and Gilabert, 2007).

However, many EFL learners struggle with English interaction although they know how to use grammatical forms (Vellanki and Bandu, 2021). Lu et al., (2023) observe that some English teaching is overly focused on testing-related content, neglecting oral English instruction which relates to real-life situations, causing

students to lose interest and become hesitant to speak English. Moreover, many teachers persist in employing traditional teaching methods and find it difficult to decide and choose the appropriate learning instruction for their students (Mahpul and Oliver, 2018). As a result, students lack meaningful oral activities since they focus more on grammatical exercises. As stated by Richards (1990), some teachers focus on problem-solving activities, while others emphasize grammar drills or pre-scripted dialogues. This inconsistency creates confusion for students. As a result, the lack of a clear learning path makes it difficult for teachers to know what activities are most effective for spoken activities. In relation to this, it is important for teachers to provide students with appropriate and suitable resources in order to overcome the problems.

In line with this, teachers in EFL classrooms have increasingly adopted tasks as a teaching method. This approach encourages students to take a more active role in their learning by focusing on communication and meaning, while still allowing them to develop their grammatical accuracy (Riccardi, 2014). Furthermore, task-based language teaching (TBLT) is one of the approaches that is believed to promote meaningful and authentic communication with language learners (Nunan, 2006). Moreover, TBLT ultimately enhances learners' motivation and willingness to communicate (Van der Zwaard and Bannink, 2020). Long (1998) believes that learners need such tasks that not only focus on meaning but also linguistic aspects. He stated that focusing on meaning is not sufficient; therefore, he proposed a more appropriate option, namely focus on form (FonF), in order to overcome the limitations. In focus on form (FonF), the meaning still becomes the primary consideration but the linguistic elements will arise.

Further, task complexity based on the operational framework, namely the Triadic Componential Framework Robinson (2001, 2005) is needed to prepare students for real-context performance; thus, tasks should have adjustable and escalating levels of difficulty and challenge. Additionally, The Cognitive Hypothesis proposed by Robinson (2005) claims that the complexity of a task influences the quality of language production and understanding, as well as the learning process in terms of progressing through developmental stages and sequences and integrating new language information during the task performance. Robinson's Cognitive Hypothesis predicts that increases in task complexity lead to greater learner-learner interaction, and several studies have found that more complex tasks result in a higher amount of meaning negotiation in the form of interaction moves such as comprehension checks and clarification requests (Riccardi, 2014). Moreover, task complexity has emerged as an important variable that may have effects on learner-learner interaction, as well as the learning opportunities that may be afforded by a task (Robinson and Gilabert, 2007).

Several studies have examined the use of tasks with respect to interaction among language learners. The findings of the study conducted by Ismail and Samad (2018) show that there are great numbers of negotiation of meaning and LREs after implementing tasks with high reasoning demand. Tien (2022) conducted task-based interaction to investigate the strategies of negotiation of meaning used by high-intermediate students. The findings indicate that clarification request is the most common strategy to occur during interaction. Riccardi (2014) in his study focuses on resource-directing and shows that learners at both proficiency levels produced similar numbers of lexical LREs that were interactive. Another study conducted by

Awwad and Tavakoli (2019) investigated the effects of using task complexity which focused on intentional reasoning demands on learners' speaking performance and interaction measured by syntactic complexity, accuracy, lexical complexity, and fluency (CALF). The result showed that syntactic complexity, accuracy, speed fluency, and filled pausing were significantly increased as a result of intentional reasoning demands.

In consideration of all this, this research intended to design tasks manipulated along cognitive factors. As Robinson and Gilabert (2007) argue, manipulating task complexity is assumed to promote interaction, particularly in the negotiation of meaning. Based on Robinson's theoretical framework, researchers have investigated how increasing the complexity of a task may impact interaction outcomes. In line with this, Robinson hypothesized that more complex tasks would result in more communication breakdowns, leading the listener to produce more clarification requests and confirmation checks during the task performance. Furthermore, a task that is complex in terms of resource-directing and resource-depleting is considered suitable to facilitate interaction. The students are forced to exchange a large amount of information and share opinions. As stated by Pica et al. (1993), a task that requires information sharing among participants can increase interaction among them. On the other hand, a task that does not require information exchange can result in low interaction (Long, 1983b). Robinson argues that such increases in complexity resemble the conceptual and linguistic development that occurs in childhood L1 acquisition, where children initially refer to the here-and-now before the there-and-then. In addition, increasing complexity along resource-depleting dimensions by removing the presence of prior knowledge, for instance,

allows learners to engage in tasks that more closely approximate real-world tasks such as answering unanticipated job interview questions in real-time. Moreover, unfamiliar tasks are more cognitively demanding than familiar ones, resulting in an increased need to negotiate meaning (Robinson, 2001). Further, Gilabert et al. (2009) hypothesized that the presence of past-time references has the potential to encourage participants to produce more interactional moves.

The students will also produce more complex vocabulary in doing a complex resource-directing task and focus on performance in doing complex resource-depleting tasks. As Robinson (2001) stated that tasks can be manipulated to increase or lessen learners' cognitive engagement when learners are performing a task. Therefore, by manipulating task complexity, teachers can control the level of challenge and difficulty of a task, which can affect learning outcomes and performance. Robinson further suggests that the linguistic aspect is the focus of the resource-directing. Meanwhile, the resource-depleting affects the students' psychological condition.

Based on the presented existing studies, there are no studies, if any, very few studies, of interaction particularly investigated types of tasks manipulated along with the cognitive factors. Therefore, the focus of this research is to create three types of tasks based on task complexity made by complex resource-directing and complex resource-depleting. Moreover, this research compared the three different tasks to see if they generated more interaction in terms of comprehension checks, confirmation checks, and clarification requests.

1.2 Research Question

Based on the background of the problems discussed above, the researcher formulated the question below:

Do different types of tasks generate a statistically significant difference of interactions in terms of the quantity of comprehension checks, confirmation checks, and clarification requests?

1.3 Objective of the Research

In relation to the research question formulated above, the objective of this research is to find out if different types of tasks generate a statistically significant difference of interactions in terms of the quantity of comprehension checks, confirmation checks, and clarification requests.

1.4 Uses of the Research

This research is expected to make contributions to educational research as presented below:

1. Theoretically, this research is expected to validate, support, or give new perspectives on the existing theories concerning task complexity in EFL classrooms, particularly in promoting interactions.

2. Practically, the findings of this research are expected to be a consideration for English teachers to create the appropriate and suitable task for students in learning English.

1.5 Scope of the Research

This research focuses on finding out if different types of tasks generate more interactions in terms of conversational moves in the negotiation of meaning, namely comprehension checks, confirmation checks, and clarification requests. There were three tasks manipulated based on task complexity. This research used each element of complex resource-directing and one element in complex resource-depleting, namely without prior knowledge to design the task.

1.6 Definition of Terms

To specify the topic of the research, below are the definitions of the terms concerning this research:

1. Interaction

   Interaction is a process of communication involving conversation and discussion between learners which facilitates the acquisition of the target language.

2. Negotiation of Meaning

   Negotiation of meaning is a process that speakers use to reach a clear understanding of each other in a language-learning situation. It involves strategies such as comprehension checks, clarification requests, and confirmation checks.

3. Task-Based Language Teaching (TBLT)

   Task-based language teaching is an approach to language learning focusing on engaging learners in meaningful tasks that require them to use the target language which reflects real-life situations and communicative goals.

4. Task Complexity

Task complexity refers to the result of the attentional, memory, reasoning, and other information-processing demands imposed by the structure of the task on the language learner. As identified in the Cognition Hypothesis, several factors that contribute to task complexity are categorized into resource-directing and resource-depleting dimensions.

This chapter has discussed the introduction of the research including the explanation of the background of the research, research questions, objectives of the research, uses of the research, scope of the research, and definition of terms. In the next chapter, the researcher described more about the theories used in this research.

II. LITERATURE REVIEW

This chapter presents the relevant theories regarding previous related studies, task-based language teaching, the concept of tasks in English language teaching, the cognition hypothesis, task complexity, the concept of interaction in English language teaching, the concept of negotiation of meaning, theoretical assumption, and hypothesis.

2.1 Previous Related Studies

Previous studies have extensively explored the significance of tasks in facilitating interaction. These studies have investigated how tasks, often framed as purposeful communicative activities, promote language learning by encouraging learners to engage in meaningful interactions. The study conducted by Tien (2022) attempted to find out the strategies of negotiation of meaning that the high intermediate students used and possible problems arising during task-based interaction. The findings revealed that task-based activities can enhance interaction. Among the strategies used, clarification requests were the most commonly used by students, while confirmation and comprehension checks were used less frequently. This indicates that these students were efficient in understanding each other and did not require extensive negotiation. However, the study also identified problems such as uneven participation and dominance by certain students. One student was found to dominate the discussion, leading to an imbalance in contributions.

Another study conducted by Flora et al., (2021) was aimed at finding out the contribution of negotiation of meaning to language accuracy when learners of high and low English proficiency levels were assigned to engage in a focused task discussion. It was found that students negotiated for meaning when discussing the topic. In relation to this, the pair consisted of high and low-level ones generated more comprehension check, followed by confirmation check and clarification request. The students actively engaged in the focused task and felt comfortable asking for help and providing explanations to each other. This active participation and collaboration during NoM contributed to the students' language accuracy.

Further, Kim (2009) examined the effects of task complexity on learner-learner interaction and learning opportunities in second-language classrooms. The findings showed that task complexity had different effects depending on the task type and learner proficiency. The occurrence of language-related episodes (LREs) varied based on task complexity, with low-proficiency learners producing more LREs during simpler tasks and high-proficiency learners producing more LREs during more complex tasks. The study also found that task complexity impacted different types of learning opportunities, such as recasts and uptake of recasts.

Further, Moattarian et al. (2019) examined whether learners' interactions are influenced by collaborative pre-planning, manipulation of task complexity, and proficiency in the language. The results did not provide evidence for the Cognition Hypothesis since there were no statistically significant differences in the occurrence of LREs among learners of various proficiency levels when they performed different tasks.

In line with this, the results of the research analyzed by Ismail and Samad (2018) suggest that in the task with a high reasoning demand, negotiation of meaning resulted in a notably greater number of LREs compared to negotiation of form, in contrast to the task with a low reasoning demand. Additionally, the current study demonstrates that learners encountered difficulties with specific grammatical aspects in both tasks.

A study of the relationship between task complexity, difficulty, and production conducted by Robinson (2001) examined the effects of the cognitive complexity of tasks on language production. He found that there was greater lexical variety on the complex version of the task and greater fluency on the simple version. He further stated that more complex resource-directing interactive tasks can result in greater interaction in terms of confirmation check and clarification request. Additionally, a study conducted by Robinson and Gilabert (2007) describe a taxonomy of task demands which distinguishes between task complexity, task condition and task difficulty.

Mahpul and Oliver (2018) explored the two dimensions of task complexity for dialogic tasks measured by complexity, accuracy, and fluency (CAF). The findings indicated that 6/8 measures showed significant differences based on task conditions. A number of elements led to increased complexity (on syntax and lexical measure), accuracy (simple task only with planning, complex task with no planning), and fluency (complex task with no planning only).

In line with this, Riccardi (2014) examined the effects of task complexity on the occurrence of LREs during interaction between ESL learners from different

proficiency levels. The findings indicated that learners at both proficiency levels produced similar numbers of lexical LREs that were interactive and individual in nature in the picture narration tasks. However, they produced more lexical LREs that were interactive during the simple and complex picture difference tasks.

Awwad and Tavakoli (2019) also explored the effects of manipulating task complexity in oral narratives on learners' L2 speech performance. The hypothesis was confirmed with respect to syntactic complexity and accuracy, whereas the results of lexical complexity and fluency failed to offer support to the predictions. Similarly, Gilabert et al., (2009) examined how changing the difficulty (cognitive complexity) of three different speaking tasks affected how learners interacted during those tasks. The results suggest that manipulating task complexity along resource-directing variables generated higher numbers of interactional moves.

Further, Robinson and Gilabert (2007) in their findings showed that task complexity led to more complex speech assessed using specific measures motivated by the conceptual/linguistic demands of the tasks but did not, however, affect accuracy, fluency and complexity assessed using general measures; tasks requiring complex reasoning about characters' intentional states led to significantly more interaction.

2.2 Task-Based Language Teaching

Task-based language teaching (TBLT) is an approach to language instruction that focuses on engaging learners in authentic and meaningful tasks that require them to use the target language communicatively (Willis and Willis, 2007). Tasks, in this context, refer to activities that involve learners in using language for a specific purpose or goal (Skehan, 1996). Unlike conventional methods, task-based language

teaching focuses on activating learners' innate abilities to learn language unconsciously by doing activities that make them notice linguistic features (Ellis et al., 2020). TBLT consists of three main stages: pre-task, task cycle, and language focus. In the pre-task stage, the teacher introduces the task and prepares the learners for it. In the task cycle stage, the learners perform the task in pairs or groups, then report their outcomes to the class, and finally reflect on their performance. In the language focus stage, the teacher draws attention to specific linguistic features that emerged from the task and provides feedback and correction.

Skehan further argues that TBLT is rooted in the belief that language learning occurs most effectively when learners engage in meaningful communication and problem-solving activities. By engaging learners in tasks, they are given opportunities to negotiate meaning, develop communicative competence, and make connections between language form and function (Long, 2015). He adds that by selecting tasks that are appropriately challenging, teachers can facilitate language development and promote learner engagement. Moreover, a central principle of TBLT is the notion of task complexity, which refers to the degree of cognitive demand and linguistic challenge posed by a task (Robinson, 2001). It is believed that task complexity plays a critical role in driving language learning.

From the concept above, it can be concluded that task-based language teaching is described as a learner-centered approach that focuses on the learner's needs and the demands of the real world, as well as the acquisition of language skills through participation in meaningful tasks and activities.

2.2.1 Concept of Tasks in English Language Teaching

A task can be defined as a piece of classroom work which involves learners in comprehending, manipulating, producing, or interacting in the target language while their attention is focused on meaning rather than form (Skehan, 1996). It is designed to promote communicative language use and foster the development of various language skills. As stated by Long (2015) that tasks should have a clear focus on meaning rather than form. This means that learners engage in tasks that require them to communicate and convey messages, using the language to achieve a specific goal. By focusing on meaning, learners are more likely to use the language in authentic ways, allowing for the integration of different language components, such as vocabulary, grammar, and discourse. As a result, learners are motivated to learn and develop their language skills within a meaningful context.

However, Long (1998) emphasizes that Focus on form (FonF) is also necessary. This centers on the strategic allocation of learner attention. It involves strategically introducing learners to specific linguistic elements (vocabulary, collocations, grammar, pragmatic patterns, etc.) within a communicative context. These elements are introduced incidentally, arising naturally during lessons primarily focused on meaning-making or communication. The impetus for these brief shifts in focus often stems from student difficulties with comprehension or production.

Moreover, Skehan (1996) suggests that tasks should have an outcome that is achievable and meaningful to the learners. The outcome provides a clear objective for learners to work towards, giving them a sense of purpose and direction. This promotes engagement and motivation, as learners feel a sense of accomplishment

when they successfully complete a task. The meaningfulness of the task ensures that learners can relate it to their own experiences and interests, making it more relevant and engaging for them. By engaging in tasks, learners have the opportunity to discover language patterns, experiment with different forms of communication, and develop their own strategies for language production. This active involvement in the learning process help learners become independent language users. As Pica et al. (1993) emphasize that a task should meet the following conditions to achieve the communicative goal:

1. Each participant holds a different portion of information which must be exchanged and manipulated in order to reach the task outcome'

2. Both participants are required to request and supply this information to each other.

3. Participants have the same or convergent goals.

4. Only one acceptable outcome is possible from their attempts to meet this goal.

Furthermore, Ellis et al., (2020) points out that there are four criteria of task as mentioned below:

1. Task involves a primary focus on meaning.

2. A task has a 'gap'.

3. The participants choose the linguistic and non-linguistic resources needed to complete the task.

4. A task has a clearly defined communicative outcome. In other words, successful performance means that the outcome of task is achieved.

He further argues that task-based teaching leads to incidental language acquisition. Learners acquire new language while they are working to achieve the outcome of the task.

Based on the explanation above, it can be stated that task is central to promoting meaningful and authentic language learning experiences. Moreover, tasks are designed to focus on meaning, have achievable and meaningful goals, and vary in complexity. By applying these principles into language teaching, teachers can create engaging and effective learning environments that facilitate language acquisition.

2.2.2 The Cognition Hypothesis

The Cognitive Hypothesis of task-based language learning (TBLT) proposed by Robinson (2001) is based on the idea that the cognitive demands of a task have a significant impact on the learner's language processing and acquisition. Robinson argues that tasks that are more cognitively demanding will push learners to use their L2 knowledge and skills in more complex and meaningful ways, leading to greater learning gains. He further predicts that complex tasks will lead to more interaction, particularly negotiation of meaning. This is due to the learners' need to work together to understand and complete the task, which will require them to communicate with each other and negotiate the meaning of the language they are using. The hypothesis also states that this negotiation creates a context for focusing on forms in both the input and the output. This means that learners are more likely to notice and correct their own mistakes, and they are also more likely to pay attention to and adopt the correct forms from the input.

The modified or simplified input can occur through various means such as repetition and rephrasing of words, phrases, or sentences; limiting the vocabulary to familiar or commonly used terms; incorporating boundary markers and sentence connectors; and decreasing sentence length and complexity by eliminating subordinate clauses (Pica et al., 1987).

Where proactive focus on form is provided, such as through pre-modified input to the task, then this may lead to more use of this on more complex tasks, rather than simpler tasks. Proactive focus on form involves explicitly teaching learners about the correct forms before they start the task. This can be done by providing learners with examples, or by explaining the rules of the language.

Robinson believed that complex tasks, along dimensions which direct the cognitive/conceptual effort they require to linguistic resources that can enable them to be performed, should result in more accurate and complex but less fluent speech production, and also more interaction and linguistic production.

2.2.3 Task Complexity

Robinson (2001) distinguishes among the term task complexity (cognitive factors), task difficulty (learner factors), and task conditions (interactive factors) as proposed in his Triadic Componential Framework. Further, task complexity in the context of cognitive factors involves the demands placed on a learner's cognitive resources when performing a specific task. In addition, there are two dimensions of task complexity based on Robinson (20001) as presented below:

Table 2.1 Task Complexity in Triadic Componential Framework

Task Complexity (Cognitive Factors)	
Resource-directing	**Resource-depleting**
1. Few elements/Many elements 2. Here and now/There-and-then 3. Reasoning demands/No reasoning demands	1. Planning/No planning 2. Single task/Dual task 3. Prior knowledge/No prior knowledge

Regarding the table above, Robinson highlights that task complexity refers to the demands that a task places on learners' cognitive abilities, such as attention, memory, and reasoning. In other words, task complexity concerns with cognitive demands and linguistic challenges presented by a task. In addition, tasks with higher levels of complexity tend to encourage learners to interact more and pay closer attention to the specific language features that are important for understanding and completing the task. This increased interaction and focus create more opportunities for learning compared to simpler task (Robinson, 2007). These processes encourage learners to engage in deeper language processing and foster the development of their language skills. Different tasks have varying degrees of complexity, which can affect learners' L2 production. This is based on two important assumptions: first, that task differs in its complexity, which affects L2 production; second, that task features can be manipulated to measure the effects of different factors on L2 production. These findings could potentially lead to the development of more effective teaching strategies and better predict the effects of various factors on L2 production.

Ellis et al., (2020) points out that tasks can be manipulated to vary in complexity, depending on factors such as the cognitive demands, linguistic resources required, and the level of learner proficiency. Complex tasks provide opportunities for

learners to stretch their language abilities and engage in more challenging linguistic processing. This challenges learners to go beyond their current language level and promotes language development.

In line with this, in the Triadic Componential Framework (TCF), features that contribute to the cognitive complexity of a task can be altered along two dimensions that affect resource allocation during L2 task performance. The first dimension is resource-directing, each of which variable relates to cognitive and conceptual demands (e.g. number of elements, reasoning demands). This draws learners' attention to vocabulary and syntax. On the other hand, resource-depleting variables refer to performance and procedural demands (e.g. familiarity with the task or topic). Increasing these variables makes great demands on learners' attention and memory resources and, consequently, disperses them. In relation to this, tasks that consist of many elements to discuss are hypothesized to trigger more comprehension checks, confirmation checks, and clarification requests (Robinson, 2001). Further, Gilabert et al. (2009) suggest that when the task is manipulated along the variable of resource-depleting such as the presence of past-time references, it has the potential to encourage participants to produce more interactional moves.

Kim (2009) in his study suggests that considering proficiency levels and task types is crucial for manipulating task complexity to promote more interaction. The resource-depleting variables in the TCF are designed to encourage automatic L2 access and use, which is similar to real-life situations. However, these variables do not specifically tell learners what language forms to use, whereas resource-directing

variables direct their attention to the specific features of the language needed to meet task demands, which allows for the use of a wider lexical variety, more complex grammatical structures, and more accurate speech, although it may come at the cost of fluency.

To sum up, the previous statements implied that cognitive complexity affects language production. By combining elements of cognitive complexity as presented in this research for language teaching, teachers can provide learners with opportunities to enhance their language skills and promote more effective language learning.

2.4 Concept of Interaction in English Language Teaching

In general, interaction involves two or more individuals communicating with each other. The exchange results in a mutual impact on everyone involved, like thoughts, feelings, and ideas. Communication skills are crucial for humans to convey meaning through language in different situations (Brown, 2001). This involves effectively sharing information, as well as understanding what others convey. Further, interaction which involves meaningful communication is confirmed to help learners acquire L2 language (Krashen, 1985; Mitchell and Myles, 2004). In other words, interaction is believed to be key in making the important links among different elements such as receiving information (input), producing language (output), and feedback (Mackey, 2002). These connections are crucial as they help learners understand and learn various parts of the language they are trying to learn.

Additionally, Rivers (1987) stated that the process of acquiring language involves interaction, which occurs when students engage in meaningful communication to convey and receive authentic messages. She believes that authentic messages are those that contain information of interest to both the speaker and the listener in a situation that holds significance for them. Additionally, it is mentioned that through interaction, students can expand their language knowledge by listening to or reading authentic linguistic materials, as well as by engaging in discussions or problem-solving tasks.

In line with this, Savignon (1997) believes that interaction encompasses various aspects, including the ability to interpret the underlying meaning of a message, employ strategies to maintain effective communication, and apply grammatical rules in a second language. This perspective emphasizes the development of language skills and the understanding of the factors that contribute to successful communication.

In brief, interaction in language learning involves students actively engaging in meaningful communication to convey and receive authentic messages. This process allows them to expand their language abilities and understanding through exposure to genuine language materials and interactions with peers. Moreover, interaction contributes to the development of second language acquisition.

2.5 Concept of Negotiation of Meaning

Negotiation of meaning is a process through which two or more individuals attempt to align their understandings of a message conveyed during a communication interaction (Long, 1996; Pica, 1996; Mackey et al., 2000). In other words,

negotiation of meaning refers to the situations when two people in a conversation have difficulty understanding each other, and then they make mutual efforts to fix the problem to see if their partner is following what they are saying. It involves speakers making deliberate or spontaneous adjustments to their language to bridge any potential gaps in understanding. Thus, the adjustments will make the output comprehensible (Mackey and Goo, 2012). Additionally, the process of adjusting one's speech may include various ways of fixing communication issues, such as repeating what has been said, breaking down complex ideas into smaller parts, using different words to explain the same thing, or offering additional time for listening and responding (Lap and Thy, 2017). Varonis and Gass (1985) have shown that negotiation for meaning is more likely to occur in groups of non-native speakers than native speakers. If these speakers are engaged upon a task that obliges them to exchange information, then the incidence of negotiation for meaning increases further. A review by Pica et al. (1993) reported that negotiation of meaning is most likely to occur when learners are involved in an interaction with the following four features:

1. Each of the students holds a different portion of information that must be exchanged and manipulated in order to reach the task outcome.

2. Both students are required to request and supply this information to each other.

3. Students have the same goal.

4. Only one outcome is possible from their attempts to meet the goal.

Thus, differences in the nature of the negotiation of meaning are resulting from different tasks and different types of interaction. Varonis and Gass (1985, as cited

in Flora, 2022) developed a model for negotiation of meaning based on the four key components as elaborated below:

1. Trigger

Trigger is the initial event that initiates the communication process. It signals the beginning of the interaction and sets the stage for the negotiations that follow. For example:

Speaker 1: "How old are you?" (Trigger)

Speaker 2: ""Old?"

2. Indicator

Indicators are cues indicating that the listener has not understood the speaker's statement or question. For example:

Speaker 1: "How old are you?"

Speaker 2: "Old?" (Indicator)

3. Response

Response is the listener's reaction to the speaker's indicator. It can be affirmative or negative, and it is an important part of the negotiation process because it provides the speaker with information about the listener's understanding. For example:

Speaker 1: "How old are you?"

Speaker 2: "Old?"

Speaker 1: "Your age" (Response)

4. Reaction to response

The reaction to response is the process of adapting the negotiation based on the speaker's response. It signals whether the listener has complete understanding to the speaker's response or not. For example:

Speaker 1: "How old are you?"

Speaker 2: "Old?"

Speaker 1: "Age, your age"

Speaker 2: "Ahh…twenty" (Reaction to response)

Furthermore, Pica (1987) points out the signals of comprehension difficulty in negotiation of meaning as explained below:

1. Comprehension checks

Comprehension checks can be defined as the moves by which one speaker attempts to determine whether the other speaker has understood a preceding message. For example:

Speaker 1: may I get your number?

Speaker 2: number?

Speaker 1: your phone number, yes, I want your phone number. 08… Understand? (comprehension checks)

Speaker 2: oh yes sure.

2. Confirmation checks

Confirmation checks refers to the moves by which one speaker seeks confirmation of the other's preceding utterance through repetition, with rising intonation, of what was perceived to be all or part of the preceding utterance. For example:

Speaker 1: may I get your nomber?

Speaker 2: nomber? number? (confirmation checks)

Speaker 1: your phone number, yes, I want your phone number.

3. Clarification requests

Clarification requests is the moves by which one speaker seeks assistance in understanding the other speaker's preceding utterance through questions, statements such as "I don't understand," or imperatives such as "Please repeat." For example:

Speaker 1: what is your favorite music genre?

Speaker 2: what? I don't know… (clarification requests)

Speaker 1: music genre, like pop, jazz, rock, what do you like?

In brief, negotiation of meaning is an important process in second language acquisition, as it facilitates interaction among interlocutors. Negotiation of meaning can occur through various strategies as mentioned earlier. These strategies can enhance the quality and quantity of the input and output that learners receive and produce, and thus promote their linguistic development.

2.6 Theoretical Assumption

As mentioned earlier, EFL students need to use strategies of negotiation of meaning in order to reach a clear understanding of each other in an interaction. Therefore, teachers should provide the students with tasks that give them opportunities to meaningful communication. Task complexity is believed to influence the level of cognitive engagement during task performance, learning outcomes, and levels of

interaction among learners. In addition, simple tasks may not provide enough challenge for learners, leading to a lack of motivation and engagement. Therefore, it is important for teachers to design tasks that are appropriate for the learners' level and to adjust the difficulty of the task as needed.

The Triadic Componential Framework, proposed by Robinson, provides a useful framework for designing and analyzing tasks with varying levels of complexity. It suggests that tasks should have adjustable levels of difficulty and challenge, with an emphasis on resource manipulation. The Cognitive Hypothesis, proposed by Robinson, suggests that the complexity of a task can influence the quality and quantity of language production and understanding, as well as the learning process in terms of progressing through developmental stages and sequences and integrating new language information during task performance.

Hence, the researcher designed three different tasks based on complex elements of resource-directing and resource-depleting. The tasks are assumed to be able to facilitate meaning-oriented and student-centered learning which contributes to language quality of the students as they receive input from the interlocutors. The researcher then examined which type of tasks produces more interaction and engages students in negotiation of meaning in terms of comprehension checks, confirmation checks, and clarification requests.

Concerning the design of Task 1, the researcher assumes that when students are presented with a task that involves many elements and no prior knowledge, they are more likely to engage in interaction. Due to the complex items of the task, students may encounter challenges in understanding the items and concepts involved. To

overcome these challenges, they may actively seek clarification by asking questions, requesting additional information, or confirming their understanding to ensure they comprehend the task correctly.

In Task 2 design, the involvement of reasoning demands and no prior knowledge can foster increased interaction among high school students. Reasoning tasks often require students to apply critical thinking skills and logical reasoning to solve problems. Given the absence of prior knowledge, they may engage in asking questions, clarifying things, and double-checking to make sure they understand the ideas of the task. The interaction can help students improve their thinking and make sure they are doing the task correctly.

Meanwhile, in the third type of task, the researcher believes that when students are presented with a task that in which the situation is in a specific context (past event) and requires no background knowledge, they may exhibit increased interaction patterns. As the task is situated in a specific context, students might find it necessary to seek clarification and confirmation to establish a clear understanding of the task elements, their relationships, and the context in which they are expected to perform. This interaction may serve to enhance their comprehension and ensure accurate task completion.

2.7 Hypothesis

Regarding the theories and theoretical assumption above, the researcher formulated the hypothesis below:

H_1: The different types of tasks generate a statistically significant difference of interaction in terms of comprehension check, confirmation check, and clarification request.

H_0: The different types of tasks do not generate a statistically significant difference of interaction in terms of comprehension check, confirmation check, and clarification request.

This chapter has elaborated the relevant theories regarding previous related studies, task-based language teaching, concept of tasks in English language teaching, the cognition hypothesis, task complexity, concept of interaction in English language teaching, concept of negotiation of meaning, and theoretical assumption.

III. METHODS

This chapter focuses on how to answer the first and second research questions by discussing about the research design, data variables, data source, research procedure, research instrument, data collecting technique, data analysis, and hypothesis testing.

3.1 Research Design

A quantitative approach was employed for the current study to find out if different types of tasks generate more interaction in terms of negotiation of meaning. The tasks were designed based on the theory of task complexity proposed by Robinson (2001), by combining the elements of complex resource-directing and complex resource-depleting. One group repeated measure design was adopted. The design is illustrated below:

<div align="center">T1 T2 T3</div>

The design is described as follows:

T1: Task 1

T2: Task 2

T3: Task 3

<div align="right">(Setiyadi, 2018)</div>

3.2 Data Variables

This research covers two variables as mentioned below.

1. Task complexity as independent variable (X)

2. Interaction (comprehension check, confirmation check, and clarification request) as dependent variable (Y)

3.3 Data Source

The sources of the data in this research are elaborated below:

3.3.1 Subjects

The participants of this study were the tenth-grade students of SMA Negeri 1 Pringsewu. There were ten classes in the tenth grade of SMA Negeri 1 Pringsewu, each of which consisted of 30-32 students. The students from one class were chosen purposely by given a speaking test to identify the high and low proficiency levels of English. The subjects were 30 students divided into 15 pairs consisting of high and low-level students in terms of their English proficiency. In a two-student group, each student is more likely to engage actively in the conversation which leads to more practice. As Flora et al., (2021) suggest that further similar research should consider grouping students with different English abilities to make the students receive more input. Thus, this research paired students with different levels of English proficiency.

3.3.2 Setting of the Research

This research was conducted in SMA Negeri 1 Pringsewu in two meetings. Fifteen pairs of students were chosen as the subjects. The given time for each pair to perform each task was 5 minutes.

3.4 Data

The data of this research were the students' utterances produced during interaction with their peers in performing the three tasks. The students' utterances were in the form of audio recordings and transcriptions. The total of the recordings is 45, as well as the transcriptions. The utterances were then identified based on the types of negotiation of meaning including comprehension checks, confirmation checks, and clarification requests.

3.5 Research Procedure

To obtain the data, the following procedure of data collection has been administered:

1. Selecting and determining the subject

The population of this research was the tenth-grade students of SMA Negeri 1 Pringsewu. The subjects were 15 pairs of students chosen from one class. The students were divided into pairs consisting of high and low-level students in terms of their English proficiency level.

2. Designing the tasks

Three types of tasks based on the complex variables of resource-directing and resource-depleting were used in this study. The variables of complex resource-directing consisted of many elements, reasoning demands, and there-and-then, while the variable chosen from complex resource-depleting was no prior knowledge. Further, variables of both resources were combined. The details of each task are explained below.

1) In Task 1 (many elements and no prior knowledge), the topic was about smart home appliances in the form of catalogs. There were two tasks for each student

to perform, which were divided into Tasks A1, A2, B1, and B2. Each task consisted of six items. The names of items in Tasks A1 and A2 were the same but differed in shapes, colors, and positions. This went the same for Tasks B1 and B2. In addition, there was no additional information provided in Task A1 and B2. On the other hand, Task A2 and B1 had information such as names, prices, and functions. When student 1 was given Task A1, student 2 had Task A2 in hand. The students who had no information about the items were required to ask their peers the names of each item by comparing and contrasting the shapes, colors, and positions. After performing the first task, Task B1 was given to student 1, while Task B2 would be given to student 2. The ground of the topic in Task 1 was because it was assumed that each item presented was still rarely used by the students in daily life. Thus, the task would trigger students' curiosity to ask their peers more questions.

2) The idea in task two (reasoning demands and no prior knowledge) was related to emergency action, specifically rescuing five people trapped in the hospital during an earthquake. The researcher assumed that the students had no experience in doing the action as it is commonly done by professionals. Furthermore, they were required to explain and argue each other's opinions on the order of each person they would save. By doing this, students would produce questions as they might have different perspectives from one another.

3) The topic of task 3 (there-and-then and no prior knowledge) depicted the different people with various age ranges in the form of a picture series. There were two pictures of two different actresses at the age of 5, 12, 17, and 25. The rationale was although some students might have known the actresses, they were

possibly unfamiliar with the younger version. In performing the task, the students were instructed to ask their peers about the characteristics of the actress in the pictures they had by using past forms. By doing so, it was expected that students would ask more questions to their interlocutors.

3. Administering the trial

To see the strengths and weaknesses of the tasks, the tasks were tried out on a different group of students before being administered to the sample. There were two pairs consisting of high and low-level proficiency in English. The two pairs performed the three designed tasks. After that, the researcher identified the strengths and weaknesses for improvement within the tasks.

4. Conducting the task

The tasks were administered in two meetings. The students were divided into pairs consisting of high and low-level students based on their proficiency level of English. Then, the instruction of the task was explained to the students in 10 minutes. Also, the students were given a chance to ask anything related to the instruction they might not understand. In addition, any chance to practice before performing the tasks was not given as it would influence the students' natural interaction. Also, the students were given 5 minutes to perform each task. To manage the time effectively, two pairs were assigned to perform the tasks at the same time. Meanwhile, the other students were doing a project given by their teacher.

In performing the task, firstly, each pair had to perform task 1 (many elements and no prior knowledge). In performing the tasks, the students were required to have a conversation with their peers and record it. Secondly, they performed task 2

(reasoning demand and no prior knowledge) by given the same time allocation as in the first task. Finally, the students performed task 3 (there-and-then and no prior knowledge).

3.5 Research Instrument

The instrument of this research was the researcher, who was supported by an audio recorder application on smartphones.

3.5.1 Validity

In this study, the researcher used the inter-rater technique. By involving some independent investigators, it is expected to increase the research validity. Considering that the research objective of this study was to find out if different task types generate more interactions. The researcher asked the supervisor to become the second investigator to make sure whether the researchers' point of view in recognizing the utterances was valid.

3.6 Data Collecting Technique

As previously mentioned, the instrument of this research was the researcher who collected the data through the following technique:

1. Audio recording

To obtain the data, the utterances produced by the students were recorded by using an audio recorder application on smartphones. The recordings contained the sounds of students' performance of the tasks.

2. Transcribing the students' utterances

After recording the students' performances, the utterances produced by the students were transcribed into written form. Then, the written utterances were coded.

3.8 Data Analysis

To answer the research question, the steps of analyzing the data are elaborated below:

1. Transcribing the audio recordings of the utterances produced by the students during the interaction when performing three types of tasks. The total of audio recordings for each task type was 15. Since there were three types of tasks, 45 audio recordings were transcribed.

2. Classifying the interactional moves in the negotiation of meaning (comprehension check, confirmation check, and clarification request) that the students produced in performing each task. Concerning this, the negotiation of meaning uttered by students in each line of the conversation was identified based on Pica (1987) and coded by using the following numbering systems:

    1) (1) for comprehension check, as characterized by the utterances when a speaker ensures whether or not the listener has understood.

    2) (2) for confirmation check, as characterized by the utterances when a listener confirms their understanding of the speaker's message.

    3) (3) for clarification request, as characterized by the utterances when a listener asks for more information or clarification.

3. Calculating and analyzing the total of comprehension check, confirmation check, and clarification request produced by students in performing each task by using One Way Repeated Measures ANOVA in SPSS.

4. Comparing the tasks as measured by comprehension check, confirmation check, and clarification request.

3.9 Hypothesis Testing

Hypothesis testing is used to prove whether the hypothesis in this research is accepted or not. The hypothesis is approved if the sig value is lower than 0.05. The formulation can be seen below:

H_1: The different types of tasks generate a statistically significant difference of interaction in terms of comprehension check, confirmation check, and clarification request.

H_0: The different types of tasks do not generate a statistically significant difference of interaction in terms of comprehension check, confirmation check, and clarification request.

The significant value is at 0.05 only on the comprehension check measurement of Task 1 vs. Task 3, and clarification request measurement of Task 1 vs. Task 2 and Task 2 vs. Task 3, while the rest are > 0.05. Thus, the three types of tasks generate a statistically significant difference in interaction in terms of comprehension check and clarification request, while confirmation check does not.

This chapter has discussed the research design, data variables, data source, data, research procedure, research instrument, data collecting technique, data analysis, and hypothesis testing.

V. CONCLUSION AND SUGGESTION

This final section presents the conclusion and suggestions related to the findings of the research question. Suggestion is provided for English teachers who intend to design tasks based on task complexity as the material to facilitate students to interactions and for those who want to conduct similar research.

5.1 Conclusion

This study presents elaboration on how tasks designed with complex resource-directing and complex resource-depleting based on task complexity can successfully facilitate high and low-English proficiency students' interaction in the context of language learning. However, the three types of tasks only facilitated students to produce more comprehension checks and clarification requests, but they could not encourage students to generate more confirmation checks. This is because students produced a relatively equal amount of utterances to confirm their understanding when performing the tasks. Hence, this study partly confirms the prediction made in the Cognition Hypothesis.

The use of complex tasks is proven to be beneficial in generating the amount of interactions, particularly in the negotiation of meaning. Students with higher proficiency can influence their language skills to explain information, rephrase vocabulary, and offer guidance to their lower proficiency peers. This supports a

more dynamic learning environment where both students are actively engaged in the tasks.

Further, the resource-depleting aspect of these tasks creates a situation where students must rely on each other's strengths. By limiting access to certain elements of resources, the task forces students to make use of their partner's knowledge and skills. This naturally leads to increased communication and interaction. High-proficiency students may need to simplify explanations or provide additional context, while low-proficiency students might contribute perspectives or draw on their background knowledge. This information exchange benefits the students in terms of their comprehension and language use. Finally, these task designs must create a learning environment that encourages collaboration which enhances the language quality of students through comprehension checks, confirmation checks, and clarification requests.

5.2 Suggestion

Building on the research findings previously discussed, the following suggestions are put forward for consideration.

1. Suggestions for English Teachers

As mentioned earlier, a task manipulated along with many elements and no prior knowledge was proven to successfully encourage student interactions, therefore, it is advisable for English teachers to adopt or adapt the task with many unfamiliar items (Task 1) to apply in the teaching-learning process. However, although the students successfully finished performing the tasks in five minutes, pauses were found during interactions. This surely affected the amount of utterances produced

by students. Therefore, it is suggested that teachers consider extending the duration allocated for each task to provide students with more opportunities for interaction.

2. Suggestions for Further Research

This research explores the Cognition Hypothesis in interaction among the tenth-grade of high school students. To broaden this field of research, further research could investigate similar concepts with different populations. As elaborated in the findings, although the students were paired into high and low levels in terms of English proficiency, they produced less interaction in terms of comprehension checks because they were from the same class and in the same developmental stage. Thus, further research may conduct a similar study by choosing mixed (H-L) participants from different classes to see if they produce more comprehension checks. As the finding of this study also showed no difference in terms of confirmation check measures, further research is suggested to extend the time allocation or modify the topic of each task type to see if different topics would trigger students to produce more confirmations. Additionally, as observed in the transcription, some of the high-level students occasionally used their native language. This might trigger their interlocutor to easily understand the message, thus possibly reducing the chance of their peers to negotiate for meaning and affecting their language quality. Concerning this, H-L Indonesian EFL undergraduate students might be suitable participants due to their higher proficiency level in English. Thus, it is advisable for further research to take this issue into account.

Concerning the limitation of the findings of this research, future studies could also benefit from designing tasks with different elements in resource allocation, both

resource directing and resource depleting, to further explore the cognitive processes of the students.

This chapter has presented the conclusion of the results and implications for English teachers and further research. The findings offer practical implications for English language teaching. Additionally, further research may build on these suggestions for further studies on this topic.

REFERENCES

Abdullah, U. (2011). EIL in practice: Indonesian and Chinese international postgraduate students negotiate meaning. *TEFLIN Journal*, *22*(2), 103–124. Retrieved from https://doi.org/10.15639/teflinjournal.v22i2/103-124.

Awwad, A and Tavakoli, P. (2019). Task complexity, language proficiency and working memory: Interaction effects on second language speech performance. *International Review of Applied Linguistics in Language Teaching. 60*. Retrieved from https://doi.org/10.1515/iral-2018-0378.

Baharun, H., Harun, H., and Othman, J. (2018). Analysis of negotiation episodes in foreign language learner interactions. *GEMA Online Journal of Language Studies*, 18(2), 202–216. Retrieved from https://doi.org/10.17576/gema-2018-1802-14.

Brooks-Lewis, K. A. (2009). Adult learners' perceptions of the incorporation of their L1 in foreign language teaching and learning. *Applied Linguistics, 30(2), 216–235.* Retrieved from https://doi:10.1093/applin/amn051.

Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). New York: Addison Wesley Longman.

Canale, M. and Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, (1) 1-47. Retrieved from https://dx.doi.org/10.1093/applin/I.1.1.

Cohen, J. (1992). A power primer (tutorials in quantitative methods for psychology). *Psychological Bulletin*, 112(1), 155–159. Retrieved from https://doi.org/10.1037/0033-2909.112.1.155.

Ellis, R. (1991). *The interaction hypothesis: A critical evaluation*. Regional Language Centre Seminar, Singapore.

Ellis, R., Skehan, P., Li, S., Shintani, N., and Lambert, C. (2020). *Task-based language teaching: Theory and practice*. Cambridge University Press.

Escobar-Mejia, V., Moreno-López, G., Sánchez-Solís, L., and Garcia-Ponce, E. (2021). Promoting interaction in emergency remote language teaching and learning: A proposal of seven tasks to negotiate meaning. *Mextesol Journal, 45(3).*

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Los Angeles: SAGE Publications.

Flora. (2022). *Negotiation of meaning: Language awareness and corrective feedback* (1st ed.). Yogyakarta: Graha Ilmu.

Flora, Mahpul, and Sukirlan, M. (2021). The contribution of negotiation of meaning to language accuracy in an efl setting through a focused task. *Studies in English Language and Education*, 8(1), 294–312. Retrieved from https://doi.org/10.24815/siele.v8i1.17667

Foster, P., and Ohta, A. S. (2005). Negotiation for meaning and peer assistance in second language classrooms. *Applied Linguistics*, 26(3), 402–430. Retrieved from https://doi:10.1093/applin/ami014.

Gass, S. M. (2005). Input and interaction. In C. J. Doughty and M. H. Long (Eds.), *The Handbook of Second Language Acquisition* (pp. 176–201). Blackwell Publishing. Retrieved from https://doi.org/10.1111/b.9781405132817.2005.00010.x

Gilabert, R., Barón, J., and Llanes, À. (2009). Manipulating cognitive complexity across task types and its impact on learners' interaction during oral performance. *IRAL - International Review of Applied Linguistics in Language Teaching*, 47(3–4), 367–395. Retrieved from https://doi.org/10.1515/iral.2009.016

Ismail, L., and Samad, A. Abd. (2018). Effects of task complexity and types of negotiation on language-related episodes in ESL classrooms. *Literacy Information and Computer Education Journal*, 9(1), 2815–2824. Retrieved from https://doi.org/10.20533/licej.2040.2589.2018.0371

Iwashita, N. (2001). The effect of learner proficiency on interactional moves and modified output in nonnative–nonnative interaction in Japanese as a foreign language. *System, 29(2), 267–287.* Retrieved from https://doi:10.1016/s0346-251x(01)00015-x.

Ji, X., and Li, L. (2021). Arguments for and against using task-based approach to foreign language teaching the appropriation of t adapt in the Chinese context. *Advances in Social Science, Education and Humanities Research*, *594*. Retrieved from https://doi.org/10.2991/assehr.k.211120.056.

Kim, Y. (2009). The effects of task complexity on learner-learner interaction. *System*, 37(2), 254–268. Retrieved from https://doi.org/10.1016/j.system.2009.02.003

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. California: Pergamon Press Inc.

Krashen, S. D. (1985). The input hypothesis: Issues and implications. *TESOL Quarterly*. London: Longman. Retrieved from https://doi.org/10.2307/3586393

Lap, T. Q., and Thy, H. V. U. (2017). EFL teachers' challenges in maximizing classroom interaction. *Studies in English Language Teaching*, 5(4), 695. Retrieved from https://doi.org/10.22158/selt.v5n4p695.

Lázaro-Ibarrola, A and Hidalgo, M. (2017). Procedural repetition in task-based interaction among young EFL learners: Does it make a difference?. *ITL - International Journal of Applied Linguistics*. *168. 183-202.* Retrieved from https://doi.org/10.1075/itl.16024.laz.

Loewen, S., and Sato, M. (2018). Interaction and instructed second language acquisition. *Language Teaching*, 51(3), 285–329. Retrieved from https://doi:10.1017/S0261444818000125.

Long, M. H. (1980). *Input, interaction, and second language acquisition*. Unpublished doctoral dissertation, University of California, Los Angeles.

Long, M. H. (1981). Input, interaction, and second-language acquisition. *Annals of the New York Academy of Sciences, 379(1 Native Langua), 259–278.* Retrieved from https://doi:10.1111/j.1749-6632.1981.tb42014.x

Long, M. H. (1983a). Native speaker/non-native speaker conversation and the negotiation of comprehensible input. *Applied Linguistics*, 4(2), *126–141.* Retrieved from https://doi.org/10.1093/applin/4.2.126.

Long, M. H. (1983b). *Native speaker/non-native speaker conversation in the second language classroom.* University of Hawai'i Working Papers in English as a Second Language 2(1)

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie and T. K. Bhatia (Eds.), *Handbook of second language acquisition*. New York: Academic Press.

Long, M. H. (1998). Focus on form in task-based language teaching. *University of Hawai'i Working Papers in ESL*, 16(2), 35–49.

Long, M. H. (2015). *Second language acquisition and task-based language teaching* (First). Chichester: Wiley Blackwell.

Lu, Y., Shi, H., Mo, Q., Tang, W., and Weng, X. (2023). Study on the application of task-based language teaching in middle school oral English teaching in China. *SHS Web of Conferences*, 168, 02004. Retrieved from https://doi.org/10.1051/shsconf/202316802004

Mackey, A. (1999). Input, interaction, and second language development: An empirical study of question formation in ESL. *Ssla*, 21, 557–587.

Mackey, A., Gass, S., and McDonough, K. (2000). How do learners perceive interactional feedback? *Studies in Second Language Acquisition*, *22*(4), 471–497. Retrieved from https://doi.org/10.1017/S0272263100004010

Mackey, A. (2002). Beyond production: learners' perceptions about interactional processes. *International Journal of Educational Research, 37(3-4), 379–394.* Retrieved from https://doi:10.1016/s0883-0355(03)00011-9

Mackey, A., Oliver, R., and Leeman, J. (2003). Interactional input and the incorporation of feedback: An exploration of NS-NNS and NNS-NNS adult and child dyads. *Language Learning*, *53*, 35-66. Retrieved from http://dx.doi.org/10.1111/1467-9922.00210.

Mackey, A. and Silver, R. (2005). Interactional tasks and English L2 learning by immigrant children in Singapore. System. 33. 239-260. 10.1016/j.system.2005.01.005.

Mackey, A. and Goo, J. (2012). Interaction approach in second language acquisition. *The Encyclopedia of Applied Linguistics.* Retrieved from https://doi:10.1002/9781405198431.wbeal0551

Mahpul and Oliver, R. (2018). The effect of task complexity in dialogic oral production by Indonesian EFL learners. *Asian EFL Journal*, 20(2), 28–59.

Mitchell, R., and Myles, F. (2004). *Second language learning theories*. London: Hodder Arnold. Retrieved from https://doi.org/10.4324/9780203770795.

Moattarian, A., Tahririan, M. H., and Alibabaei, A. (2019). Task complexity manipulation and EFL learners' interactions in the process of collaborative pre-planning. *Applied Research on English Language*, 8(1), 51–78. Retrieved from https://doi.org/10.22108/are.2018.112142.1333

Nunan, D. (2006). Task-based language teaching in the Asia context: Defining 'task'. *Asian EFL Journal*, 8(3), 12–18.

Oliver, R. (1998). Negotiation of meaning in child interactions. *The Modern Language Journal, 82(3), 372.* Retrieved from https://doi:10.2307/329962.

Oliver, R. (2002). The patterns of negotiation for meaning in child interactions. *The Modern Language Journal*, *86*(1), 97–111. Retrieved from https://doi.org/10.1111/1540-4781.00138.

Pica, T. (1987). Second-language acquisition, social interaction, and the classroom. *Applied Linguistics*, 8(1), 3–21.

Pica, T., Young, R., and Doughty, C. (1987). The impact of interaction on comprehension. *TESOL Quarterly, 21(4), 737.* Retrieved from https://doi:10.2307/3586992

Pica, T., Holliday, L., Lewis, N., Berducci, D., and Newman, J. (1991). Language learning through interaction. *Studies in Second Language Acquisition, 13(03), 343.* Retrieved from https://doi:10.1017/s0272263100010020

Pica, T., Kanagy, R., and Falodun, J. (1993). Choosing and using communication tasks for second language instruction and research. In G. Crookes and S. M.

Gass (Eds.), *Tasks and language learning: Integrating theory and practice* (1st ed., pp. 9–34). Clevedon: Multilingual Matters.

Pica, T. (1996). The essential role of negotiation in the communicative classroom. *JALT Journal*, 18(2).

Plough, I., and Gass, S. M. (1993). Interlocutor and task familiarity: Effects on interactional structure. In G. Crookes and S. M. Gass (Eds.), *Tasks and language learning: Integrating theory and practice* (pp. 35–56). Clevedon, England: Multilingual Matters

Riccardi, D. (2014). *Task complexity, task type, and learner-learner interaction: a replication study with adult ESL learners*. Unpublished Thesis: University of Toronto. Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/68535/1/Riccardi_Daniel_2 01411_MA_thesis.pdf

Richards, J. C. (1990). Conversationally speaking: Approaches to the teaching of conversation. In *The Language Teaching Matrix* (pp. 67–86). New York: Cambridge University Press. Retrieved from https://doi.org/10.1017/cbo9780511667152.006

Rivers, W. M. (1987). Interaction as the key to teaching language for communication. In *Interactive language teaching* (pp. 3–17). Cambridge: Cambridge University Press.

Robinson, P. (2001). Task complexity, task difficulty, and task production: exploring interaction in a componential framework. *Applied Linguistics*, 22(1).

Robinson, P. (2005). Cognitive complexity and task sequencing: Studies in a componential framework for second language task design. *IRAL - International Review of Applied Linguistics in Language Teaching. 43. 1-32*. Retrieved from https://doi.org/10.1515/iral.2005.43.1.1.

Robinson, P. (2007). Task complexity, theory of mind, and intentional reasoning: Effects on L2 speech production, interaction, uptake and perceptions of task difficulty. *International Review of Applied Linguistics in Language Teaching (IRAL)*, 45(3), 193–213. Retrieved from https://doi.org/10.1515/iral.2007.009

Robinson, P., and Gilabert, R. (2007). Task complexity, the cognition hypothesis and second language learning and performance. *IRAL - International Review of Applied Linguistics in Language Teaching*, 45(3), 161–176. Retrieved from https://doi.org/10.1515/iral.2007.007

Savignon, S. J. (1997). *Communicative competence: Theory and classroom practice* (2nd ed.). New York: McGraw Hill.

Setiyadi, Ag. B. (2018). *Metode penelitian untuk pengajaran bahasa asing: Pendekatan kuantitatif dan kualitatif* (Second). Yogyakarta: Graha Ilmu.

Skehan, P. (1996). A Framework for the implementation of task-based instruction. *Applied Linguistics*, 17(1).

Swain, M. and Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *The Modern Language Journal*. 82. Retrieved from https://doi.org/10.1111/j.1540-4781.1998.tb01209.x.

Tien, T. B. (2022). An investigation into ESL student interaction during task-based activities. *Journal for Educators, Teachers and Trainers*, 13(2), 281–289. Retrieved from https://doi.org/10.47750/jett.2022.13.02.027

Tudor, I. (2001). *The dynamics of the language classroom*. New York: Cambridge University Press.

Van der Zwaard, R., and Bannink, A. (2020). Negotiation of meaning in digital L2 learning interaction: Task design versus task performance. *TESOL Quarterly*, 54(1), 56–89. Retrieved from https://doi.org/10.1002/tesq.537

Varonis, E. M., and Gass, S. (1985). Non-native/non-native conversations: A model for negotiation of meaning. *Applied Linguistics*, 6(1), 71–90. Retrieved from https://doi.org/10.1093/applin/6.1.71

Vellanki, S. S., and Bandu, S. (2021). Engaging students online with technology-mediated task-based language teaching. *Arab World English Journal (AWEJ)*, (1), 107–126. Retrieved from https://doi.org/10.24093/awej/covid.8

Willis, D., and Willis, J. (2007). *Doing task-based teaching*. Oxford: Oxford University Press.

Yufrizal, H. (2001). Negotiation of meaning and language acquisition by Indonesia EFL learners. *TEFLIN Journal*, 12(1), 60–87. Retrieved from https://doi.org/http://dx.doi.org/10.15639/teflinjournal.v12i1/60-87

Yufrizal, H. (2011). Communicative negotiation of meaning in second language development. *International Conference on Teaching and Learning in Higher Education (ICTLHE)*.